

CURRENT MODE BANG-BANG CONTROLLER IN A SWITCHING VOLTAGE REGULATOR

ABSTRACT OF THE DISCLOSURE

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A regulator provides a load voltage. The regulator includes a power driver having a feedback input and a power driver voltage. The regulator includes a comparator having a comparator output related to a combination of the load voltage and a power driver current. The regulator includes a pulse generator
10 controlled by the comparator output and having output pulses with fixed pulse widths. The regulator includes a time limit circuit controlled by the output pulses. The time limit circuit provides the output pulses to the feedback input subject to a time limit between the output pulses.